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JANUARY 1990

PIKES PEAK RADIO AMATEUR ASSOCIATION, INC.
P.O. Box 16521
Colorado Springs, CO 80935

FIRST CLASS MAIL



Ø BEAT



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* denotes the first year of a two-year term.

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The Pikes Peak Radio Amateur Association meets on the second Wednesday of each month at 7:00 p.m. All amateurs and interested parties are invited to attend.

EDITOR: Ron Deutsch NKØP 4305 Ridgeline Drive Colorado Springs, Co. 80918 (719) 593-8352 or 145.01 (Packet)

MESSAGE FROM THE PRESIDENT.....

I don't know where the month has gone, but even with the best of intentions Ron is waiting for this file to reach his house so he can close out another edition of the newsletter.

For those of you who did not attend, the club Christmas party at the Elk's Lodge was a big success. Business kept me in Boulder longer than I planned on and when I arrived the food was gone. The barbershop quartet was in fine form however, and sang quit a few nice tunes. Thanks to Renay Boyes for a real nice evening.

The swapfest took a great leap forward this month. As you'll see elsewhere in this issue, ICOM America has accepted our invitation and will be attending our swapfest at Rustic Hills Mall this year. I have also received a verbal confirmation from ETO here in Colorado Springs. We are still waiting for word from Amateur Electronic Supply in Las Vegas. The folks at the mall have agreed to let us have an additional 6000 square feet of floor space adjacent to the center of the mall for displays. Ron, NKØP, has taken on the task of organizing table rental this year and Rosie will be handling ticket sales. We have ordered an IC-735 transceiver from ICOM for our grand prize again this year and should have it in the near future. I'll keep you posted as we continue to put together what should be the best swapfest ever.

In March we are going to send a copy of this newsletter to every licensed amateur radio operator in El Paso and Teller counties. That amounts to just over 1000 copies. The immediate question that comes to mind is where we will find enough help to fold, staple and stamp that many newsletters. I'm sure that will not be a problem (Ron's refrigerator keeps beer real cold).

Each month we print 250 copies of ZeroBeat. Approximately 150 of those go to club members, and the rest are given free to nonmembers and to advertisers. A better question might be to ask where are all of the newsletters going. At an average club meeting we see between 50 and 60 people. That leaves about 90 members and another 900 or so nonmembers that we never hear from. I cannot even begin to guess why over half of the club membership doesn't show up at the monthly meetings. In the year or so that I have been a club officer I have seen a steady procession of interesting guest speakers. I'll be the first to admit we've been caught short a few times but last minute cancellations are difficult to overcome. We have moved from the crowded confines of Giuseppe's and the cavernous cafeteria at HP to the friendly and easily accessible Elk's Lodge. I'm trying to keep the business portion of the meeting as short as possible, but there will always be some business that must be taken care of before we get to the fun stuff. If you have ideas for club projects or guest speakers please let me know.

And if you haven't been to a club meeting in a while, why not give us a try? Speaking of club meetings, the January meeting is on the 10th and it's homebrew night. Hope to see you there.

73's Rick

GENERAL MEETING

DEC. 13, 1989

NOTE: THIS WAS THE CHRISTMAS PARTY AND SHORT BUSINESS MEETING

Meeting was convened by vice president Dave, NOION. It was ROSIE'S, WOMNL, birthday and anniversary.

Everyone introduced themselves.

Minutes were approved as printed in OBEAT

Treasurers report as follows:

Previous \$2011.31

Income \$588.00

Expenses \$468.65

Balance, \$2130.66

Committee reports as follows:

RFI:

JEFF NOJHL 591-6438 nothing to report

EDUCATION:

BUD NOODF 475-0537 Next class will be in April

D&B SCHOOL:

BUD NOAA 689-2963 Nothing new

ARES:

NOION for Mike KOTER 636-1290 Severe weather net is now part of ARES, they need a new manager for it.

PUBLIC SERVICE:

MIKE KOTER 636-1290 Nothing to report

CCARC:

OAK KOFOL 570-7782 Nothing to report

VE TESTING:

MAX KDOEL 488-9269 Next testing 2nd weekend in March Chapman College Flintridge and Academy. Pre-registration required.

O BEAT:

RON NKOP 593-8352 January is homebrew night plus award for the best news items submitted past 3 months.

Old business:

Nothing to report.

New business:

January is home brew night and next board meeting at QTH of AL NOCMW.

Short break then raffle prizes followed.

Desolder pump NOHRD WILL

QSL cards W2TJO TOM,

QSL cards JODI KAOZ,

Cable ties HARVEY WB6YXD,

FCC rule book RON KEDLZ

Antenna wire BARRY WOMOG,

T-shirt RUSS WAITING CALL

THE CHRISTMAS RAFFLE PRIZE THE UNIDEN HR2610 WAS WON BY RON KEDLZ

The Christmas dinner followed it was a very enjoyable dinner and the barber shop quartet was enjoyed by all.

Club apologizes for ash trays being out as it was decided at last meeting to have it non smoking.

See you all at next meeting

Submitted by Al NOCMW, Secretary

BOARD MEETING

DEC. 18, 1989

Meeting was held at the QTH of AL NOCMW, PRESENT WERE RON NKOP, RICK WB7THT, AL NOCMW, ROSIE WOMNL, RUSS WAITING CALL, FLOYD KB5FCN.

QTH WAS NICELY DECORATED BY FRANCES NOIUT.

President RICK announced that ICOM will be here for the swapfest, and that letters have been sent out to AES Las Vegas, and CW electronics.

The grand prize, an ICOM 735 has been ordered. Rick needs a lot of help. Floyd and Ron have volunteered for table management this year.

We will have a mass mailing of Obeat to all El Paso and Teller county hams about the swapfest. Everyone please spread the word around.

It will be held on Armed Forces Weekend May 19 a Saturday at Rustic Hills Mall same place as last 3 years.

Club to negotiate with Bud, WBOTB for the coax and antenna at the weather bureau.

ARES still needs a severe weather net manager.

For care and share bring one can or more of food to next meeting you will be given one ticket per person to the monthly raffle.

We are still waiting a letter from the PPFM Association on building up a special service event repeater.

Board thanks RENAY KACROY for an outstanding job on the Christmas party and to all who helped make it a nice success. Thanks to Fred KACME for getting the location.

It has been decided that tables for the swapfest will cost \$10.00 for advance registration and \$12.00 at door, as we do not charge any admission fee.

VOLUNTEER TO RICK ANY SERVICE U CAN DO. He needs ticket manager and other essential jobs. Lets make this the best in the front range this year, we can do it.

Next board meeting at QTH of FLOYD, KB5FCN on the Air Force Academy.

Being no further business meeting adjourned.

A few stayed around to repair a defective NMO assembly.

Al, NOCMW, Secretary

View From Canada

by Keith NY0T / VE3PDD

Well, I just finished my schedule with Ron NK0P, Al NOCMW, and Jim WASABB on ten meter SSB at 28.360 Mhz. It combined with my monthly copy of O-Beat, certainly bring back many pleasant memories of my times in Colorado Springs.

I would like to take this opportunity to tell you what I have been doing since my return to Canada. My travels finally came to an end at Kingston, ON, a city of 100,000 people situated halfway between the cities of Montreal and Toronto. While en route, I had the opportunity to talk with many stations and they helped me with either making the trip shorter or giving me directions. The one thing that I noticed was that many of the gaps that I had noticed on Interstate 80 have now been filled in and UHF activity is on the rise. I was pleasantly surprised when I got on the local two meter repeater to find that Phil VE1ARC was also moving into the Kingston area as well (I think that you all should remember Phil as being one of the Club's best O-Beat editors).

What have I been doing since settling into my new accommodation? I immediately got up my small tower so that I could be on 2m and 70cm packet and repeater activity. I also use this same tower to support antennas for 80 and 20 meters. I have made several contacts on both and they seem to be working well. While my father VO1MA was visiting in October, we put up my 40 foot self supporter and got my satellite antennas installed. Everything seemed to be going well, but it seems that my 70 cm IC471 did not do so well and it is now back at the repair shop. You can well bet that when it gets back, I shall very active on OSCAR-13!!

Recently, with a little prompting from Jim WASABB, I recently put up a ten meter dipole and I am certainly glad that I did. The band has been hopping and I have been DXing all around. It also permits me to check with the Colorado Springs group on 28.360 every Sunday.

I also have been doing some AMTOR contacts with Jim WASABB as well and we are usually on

14.085 every Sunday at 9 am Mountain time. I have never tried AMTOR all that much before, and I can certainly attest that it could be a very addictive mode. I guess you can say that I have been bitten by the AMTOR bug and have been making contacts all around North America. Whoever says that you cannot use a relay switched rig is full of it as I am doing it with an IC745.

What is the activity like in Kingston?? Phil and I went to one of the local club meetings and we were the youngest two people there. We both agreed that we certainly miss the enthusiasm and the camaraderie that you enjoy in the Pikes Peak Radio Amateur Association.

There are two 2 meter repeaters in the Kingston area one that has moderate coverage but is linked to a relay system that gives coverage to communities as far as 250-300 miles away and the other is a local autopatch machine.

There are some wide area coverage machines, but they are in Watertown, NY, just 60 miles north of Syracuse and there are a couple in Brookville ON and Belleville ON. There are no UHF/440 machines in the local area, but I do access machines in the Syracuse area, some 100 miles from my QTH.

Phil and I plan on going to the Dayton Hamvention this year and would like to see a good representation from the Colorado Springs area. We are staying at the LK Motel again this year and plan on attending as many of the functions as possible. If you have never been to the Dayton Hamvention, it is something that you must go to at least once in your ham lifetime.

If you want to leave a message for Phil or myself, you can do so by passing it to Al, Ron, or Jim when we get together on one of our schedules. Otherwise, if you are on packet, my home PBBS is VE3CDY or VE3JF and I have reactivated my telephone BBS and it can be reached at (613)-542-9901.

Cheers for now.

I hope that you all had a Merry Christmas and wish you all a Happy New Year.

73 de Keith NY0T / VE3PDD

Oldies but Goodies

Rick Brown KD0SU

I have always wondered how many people are turned off to Ham Radio when they look at the cost of a new SSB transceiver in QST or one of the other magazines. I know the prices sure make me shudder and I have been a ham for over 25 years. There are a lot of good used rigs on the market for ham just starting out. Last Spring at a Hamfest in Denver I picked up the Drake R4B/T4XB receiver and transmitter combination for a very reasonable price (\$300). For those of you who have recently started in Ham radio I would like to say that Drake was one of the last U.S. manufacturers to get out of the Amateur market. They consistently produced some of the best gear on the market and you still find a lot of their equipment in use.

I thought I would give a description of the equipment just to give you an idea of what it is. This equipment does not have all of the bells and whistles that many of today's rigs have, but still performs very well. First of all, the R4B/T4XB combination comes equipped to work what were the standard HF bands at the time the equipment was manufactured 80, 40, 20, 15, and 10 meters (28.5 to 29 MHz). A great advantage over much of the gear of that era is that you can purchase crystals so the equipment can cover most 500 KHz segments from 500 KHz to 30 MHz. Also, since this is a receiver/transmitter combination, you can operate split frequencies (i.e., transmit on one frequency and receive on another) which is sometimes required for DX work.

The Drake transmitters were always known for the high quality audio they produced, and this rig never fails to get comments from other operators on how good it sounds. It doesn't have speech processing, but I believe good quality audio is one of the best ways to make it through a pileup. The T4XB runs about 200 watts PEP input power which makes it comparable with most transceivers on the market today. It runs 200 watts on CW and reduced power on AM. For those into RTTY it is capable of FSK operation.

The R4B receiver is an old friend. I owned one of these receivers when I was a Technician and used it with VHF converters to operate on six and two meters. Guess I am showing my age when I talk about that. The receiver is quite selective and has passband tuning from 400 Hz to 4.8 KHz as well as a notch filter built in. It does not use crystal filters, but I never found that to be a serious prob-

lem. The receiver has the crystal positions for 10 additional 500 KHz segments as I pointed out before. This is great for the WARC bands, for operating some MARS frequencies, or for SWling. Since this equipment is not frequency synthesized it has an analog dial and a 25 KHz crystal calibrator built in so that you can ensure your frequency at all times.

While this equipment requires a little more work to operate than today's solid state rigs, I think it is still a great way to get started at a very reasonable price. Drake manufactured a series of transceivers and other equipment as well which is still to be found at reasonable prices.

In case you are concerned about buying equipment when the manufacturer is out of business let me assure you this is not a problem. I just wrote the Drake company to see if they still provide any service or have a stock of parts. I quickly received a letter from them with a quote on what it would cost for a refurbishment of this gear if I wished, and a price list for the parts they stock. They also told me they have five technicians on staff dedicated to working on the amateur gear they manufactured. I always knew the company was very reputable, and it is reassuring to find they still stand behind their products.

If you know someone who would like to get started in Ham Radio, but is hesitant because of the cost remind them there is a lot of good used gear on the market. Drake is not the only one, just the one I am most familiar with. All they have to do is check the Ham Ads in QST or go to a swapfest to find some very good deals. I find I use my Drake Twins almost as much as I use the solid state rig in my shack. It may not be the latest in solid state technology, but it also doesn't require a degree in computer science and a room full of test equipment to troubleshoot if something isn't working correctly.

"THE VIEW FROM THE PEAK"

by George Hinds, N8CIX

CAN YOU HELP CARRY THE SPIRIT OF CHRISTMAS THROUGH THE COMING YEAR? I know most of us get a little short-tempered at times with the professional cheermongers we encounter during the holidays: after several hundred repetitions, even "Merry Christmas" can ring hollow on one's ears, and more so when it's coming from a commercial establishment. Personally, I find a great deal more comfort and truth toward mankind in the ringing of the Salvation Army bellringers than in piped-out canned music from mall owners.

Maybe it's because so many of the folks we encounter for eleven months of the year are filled with doom and gloom. As holiday season approaches, they may curse the snowfall that turns our world pristine white and brings water to near-empty reservoirs; the chill that calls for a warm fire is seen as nothing more than another source of high heating costs. These are the folks who, when they hear the song "White Christmas", think not of beauty and love but of snow-shoveling and aching backs. Admittedly, there have been times when I've been among their numbers — but not for long.

Then, in a twinkling of an eye during December, they change character overnight and switch from being a Scrooge to becoming effusively, even sometimes obnoxiously, cheerful. Well, upon reflection, even that change is a change for the better. Most of us would rather encounter a Santa than a Scrooge.

That holds true for our excursions into amateur radio, too. Wouldn't it be wonderful if we could each, as individuals, exemplify the spirit of brotherly love and giving something of ourselves, not just at the holiday season but throughout the year in our contacts personally and on the air, at least to some degree? It might take some effort, especially if not everything is going our way at the time, to be pleasant and extend the hand of understanding and friendship to the contacts we make, but think of the dividends to be reaped: friendship in return, understanding among people around the world; personal satisfaction that in some small way our town or even the world, and certainly amateur radio, is the better for what we are doing in an area where we have the power to make a difference.

It's not impossible. I can think of so many good things the PPRAA family has done over the years around the Pikes Peak region providing communications to so many civic, charitable and re-

search groups. The value of such volunteer service cannot be equated in dollars, only in our satisfaction in the good we have done and the spirit of personal pride and friendship accompanying our efforts.

Too, with so many of us on HF talking around the world, with no added cost to ourselves we can extend that goodness of spirit to those in other countries. Let's not just talk among ourselves about the good that amateur radio can do — let's provide the living example for others to follow. Be a year-round ham radio Santa; when the opportunity arises put your equipment to truly worthwhile use and give of yourself and your skills in ham radio to others when and where you can, at home with a marathon or with search and rescue, etc., or around the world as in earthquakes, hurricanes, and such.

WHEN THE GRINCH STOLE CHRISTMAS was what happened recently to the Denver Radio Club, according to an article in the 12/27 issue of The Denver Post.

A Christmas Day thief ripped off four pieces of equipment from the Club, effectively silencing, at least for the short term, Amateur Radio Station W0TX located at the Red Cross offices in Denver. A window was broken in the night to enter the club's headquarters; three transceivers plus a fourth piece of equipment were removed by the crook. Value was placed at \$5,000.

During the recent Hurricane Hugo and California earthquake disasters, the club was responsible for handling some 7,000 messages for the Red Cross. Whoever did the job on the club, they passed up some valuable computer equipment in favor of stealing amateur radio gear. While insurance may cover part of the loss, the club policy has a deductible clause: for \$2,500.00!

73, George N8CIX For Thelma and myself, we truly hope you had the very best of holiday seasons with good health, family and good friends.

73, George N8CIX.

DITS AND BITS

FOR SALE OR WANT ADS WILL BE RUN SPACE AVAILABLE FREE OF CHARGE TO CLUB MEMBERS. OTHERS ARE \$2 FOR 25 WORDS OR LESS AND MUST HAM RADIO RELATED.

FOR SALE:

1. Gemini 10 printer - \$100 It works great but Santa was good to me and I no longer need it.

2. BMC monochrome monitor - \$25 I used this with my VIC-20 and C-64 for a dedicated packet terminal.

Rick Brown KD0SU Phone 531-9423

Heath ZVM-138 Computer monitor

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Heath IO-4325 25 Mhz, Dual Trace Scope

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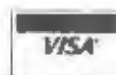
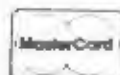
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December 12, 1989

Richard W. Kile, President
PIKES PEAK RADIO AMATEUR ASSN.
4922 Crestwood Drive
Colorado Springs, CO 80918

Dear Richard:

Thank you for your letter to Evelyn Garrison dated December 1, 1989.

We are pleased that you've chosen the IC-735 as the Grand Prize for the 1990 Pikes Peak Radio Amateur Association Swapfest. There has not been any change in the pricing policy for hamfest prizes. The price for the IC-735 will be 40% off our suggested retail price. Just contact Amateur Electronic Supply in Las Vegas and have them place an order with us specifying the name of the hamfest and the show dates.

I am happy to inform you that ICOM will be attending the show in 1990. We look forward to supporting the Pikes Peak Radio Amateur Association and any ICOM dealers that may be attending.

Best regards,

Harold Christensen KC4CYL
National Sales Coordinator
Amateur Division

HC:ls

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ACADEMY RADIO CLUB MEETING MINUTES

The Academy Radio Club met on December 5, 1989 at the Tee House on the Air Force Academy.

The meeting was called to order at 1200 by Doug, NCHJT.

The following amateurs were in attendance:

Doug, NCHJT;

Floyd, KB5FCN;

Rick, WB7THT;

Ron, NK0P;

Lee, KB0HW;

Al, AL7FU;

Max, KD0EL;

Dave, W0FBI.

The club welcomed new members,

Max Stafford, KD0EL;

Dave Lohr, W0FBI.

Max is a Precision Measurement Electronics specialist on the Academy and Dave is Chief of Internal Medicine at the Academy Hospital.

The minutes of the previous meeting were approved as published in November Q-Beat newsletter.

The club Treasury stands at \$118.00

The Club station was discussed. The vertical antenna has a cracked insulator and needs work before it can be used. The 7-element HF beam needs to be tested and erected.

The station call sign is KOMIC (we share with the Cadet Radio Club station). All who use the station are encouraged to use the club call sign. The station is equipped with a Kenwood TS930 and an ICOM 735 HF radio. There is also a Collins G-line station but it is not currently operational.

Academy Club participated in 1990 ARRL Field Day was also discussed. Max, KD0EL will look into this.

The meeting adjourned at 12:45 after a nice lunch.

The next meeting will be held on January 9, 1990 at 11:30.

The Academy Club is open to all interested amateurs. For more information contact Ron, NK0P (H) 523-8353 or (W) 472-5137.

73s Ron, Sec/Treasurer.

1934 Official

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edited by Hugo Gernsback
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 N0JLH => JEFF BOYES
 N0JMP => CHESTER TOMS
 N0JUF => JEFF HANSEN
 WD0K => GEO. BEAUCHAMP, SR.
 N0KCL => PAUL BAME
 N0KIC => JOHN CHAPMAN
 K0KRG => ROGER LAPORA
 KA0KXW => LES SULLIVAN
 AA0L => RAY UBERECKEN
 N0LA => PETER LaFOSSE
 K0LBU => JOSEPH ADAMS
 WB0LJT => GEORGE FOSHEE
 W0LME => CLIFF UPTON
 KE0LZ => RON SVOBODA
 W0MCT => DOC CORNELL
 W0MHV => GLENN FLYNN
 WA0MNL => ROSIE CALAWAY
 W0MOG => BARRY COOK
 KA0MTX => RALPH STREAMER
 W0MXY => HAL BERGESON
 KD0NB => EDWARD LUND
 KC0NC => LES BORST
 AD0O => TOM WEATHERLEY
 KX0O => LAUREN LIBBY
 KE0OW => ROXY VAN HOUTAN
 W0OWN => GLENN LORANG
 KA0OYZ => ARLENE HICKEY
 NK0P => RON DEUTSCH
 WF0P => MARK PETERSON
 KE0PA => ROGER MYLI
 KA0PXE => CONNIE STREAMER
 KD0QE => HERB CHILDRESS
 KB0QI => FAYE HARREN
 KD0RL => MARK CARLSON
 K0ROL => OAK STOCKTON
 KA0ROY => RENAY BOYES
 KA0ROZ => JODY BORST
 W0RTB => HARVY KOEPP
 W0RTH => ROBERT TESAR
 K0QS => JOSEPH MARCIANO
 WB0SDW => DAVID RIESE
 WA0SXE => JIM CANNELL
 WD0T => TODD DRAVLAND
 KA0TAO => LARRY OCHS
 WA0TBJ => KIRBY STAFFORD
 K0TER => MIKE STANSBERRY
 WB0TIB => ROBERT WIDMAR
 KA0TRY => JOHN POYNOR
 KA0TRZ => LONNY JAMES
 KE0TS => LINDSAY FISCHER
 KA0TSA => DALEAN JAMES
 K0UAB => WALTER BROWN
 W0UDZ => GEORGE CLARK
 K0UKO => LARRY STEELE
 K0UNS => JIM ZIMMERMAN
 W0VO => ED MEANS
 KE0WC => DON CHATELAIN
 KA0WIE => ALFRED SONTAG
 KA0WSK => NEAL CLINE
 K0WVB => CARL WOODRUFF
 KB0WX => DICK STIENMIER
 WR0Y => BILL PHERIGO
 KE0YB => CHARLES PHELPS
 KA0YLR => SYLVIA LEHMPUHL
 W0YNE => WARREN HICKEY
 KA0YTK => MINT TANNER
 KA0YVZ => JOHN TRAVIS
 AD0Z => ALLEN BAILEY
 KA0ZGR => FRANK LUCIANI

KA0ZHM => ELLEN HAASE
 KA0ZHN => LEIGHTON HOGUE
 KA0ZHO => RONALD MORRIS
 KA0ZHP => SHANNON HULBERT
 W0ZHZ => DAVID WILSON
 KA0ZSM => MARY JANE ROSS

1 - AREA

N1CKE => BOB NORRIS
 W1EWC => TONY DOSS
 N1FED => KAREN GARBEE
 W1JU => HARVEY LeCATO

2 - AREA

KB2BAJ => ELANOR BELLAMY
 W2CRS => DOUG ALLEN
 WB2EVR => WILLIAM BELLAMY
 N2HHF => KURT HORTON
 KB2IDW => PATTY THOMPSON
 WA2JWF => MAURICE WALKER
 K2MAH => ARTHUR GEORGE
 W2SRQ => WILLIAM FRENCH
 W2TJO => THOMAS BRERETON

3 - AREA

N3EUA => BDALE GARBEE
 DB3RC => JOHN CUNLIFFE
 W3TMR => MEL HOSEA

4 - AREA

N4DJS => DAVID RITCHIE
 N4NLN => MIKE O'DELL
 WB4NWC => THOMAS KENIMER
 W4OHS => WALTER FIGEL Jr.
 N4TGO => DOUG PARIS
 K4YCD => BILL STANFILL

5 - AREA

KB5FCN => FLOYD BRYANT
 N5FOK => JIM BRODEN
 KB5FTN => FAYLENE BRYANT
 K5HGQ => JOHN KNIGHT
 WB5MCO => BRAD FRIEDEN
 KG5N => NICK HULBERT
 WA5SKK => JIM PUTNAM
 W5TDH => KENNETH GILBERT

6 - AREA

AH6AP => MYRON BABCOCK
 WB6FRV => RON OCHOA
 AH6GF => IRENE LONG

7 - AREA

WA7ARK => MIKE MLADEJOVSKY
 WB7BKM => FRED HIRSCH
 W7BKR => LOREN GAITHER
 NL7CO => DON ROSS
 WB7CPP => EDIE HIRSCH
 KL7IBA => FRANK VAN ZANT
 K7MA => ROD JENSEN
 KA7NNX => SUSAN SMITH
 W7QHE => DICK DIDDAMS
 WB7THT => RICHARD KILE
 KA7VGP => AUDREY JENSEN
 WB7VNF => EVERETT WITTIG Jr.
 KB7WY => STEVE MOOERS

8 - AREA

N8AYU => CLAY FECHTER
 N8CIX => GEORGE HINDS
 KB8CPC => DAVID KLINE
 K8DOC => BOB FLEMING
 W8JTD => FRED ALDEN

9 - AREA

N9AHA => PAMELA BENTON
 W9MHL => MICHAEL LEHMPUHL
 KE9S => MALCOLM BENTON
 W9YYO => CHARLES EINING

TRIVIA CORNER

Back by popular demand (?), your monthly chance to tease your brain and win a years membership (or renewal) in PPRAA.

Submit all entries to:

WJLJ
7460 Teas Drive
Colorado Springs, Colorado 80920

This month's question requires you to be on your honor and not look it up. Just give it a good guess and see what happens.

NAME THE FOUR STATES THAT HAVE THE LEAST NUMBER OF HAMS IN THEM.

73a WJLJ

THANKS....

I want to thank the club and all those who helped and supported me in passing my license exams.

Rua Calaway

CLUB HELPS CARE & SHARE

This month we will give a free raffle ticket to anyone who brings a canned food donation to the club meeting. Limit one ticket per person. Food will be donated to the local Care & Share food pantry.

CONGRATULATIONS....

On November 5, 1989, George Beauchamp, Sr. W0DK, received the 10-10 W.A.C. award from the 10-10 International Net, Inc. George was #205 to get that award.

OEM PARTS

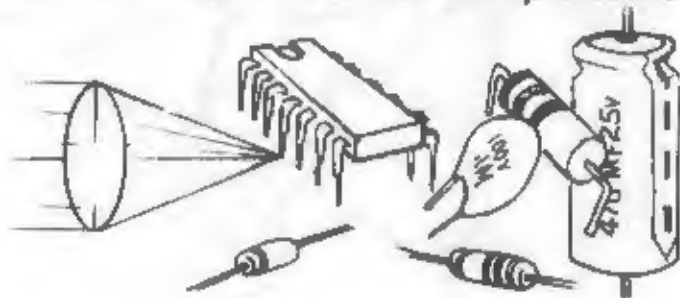
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FIRE IN COMMUNICATIONS

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JOHN
W0QADV

GEORGE
KD0RW

AL
N0CMW

DOUG
W2CRS

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Denver, CO 80203
(303) 632-1111

610 E. Fillmore St.
Colorado Springs, CO 80907
(719) 473-2828





NOTICE!!!

JANUARY 10TH IS HOME BREW NITE.

WIN \$25 FOR 1ST PLACE
\$10 FOR 2ND PLACE
\$5 FOR 3RD PLACE

1989-90 SWAPFESTS

LARCFEST—Boulder County Fairgrounds Saturday April 7, 1990.

PPRAA—Saturday May 19, 1990 at the Rustic Hills Mall.

NOTE: If you know of any Colorado Swapfests not printed here please let me know and I will include them in the next issue.

Membership Application PIKES PEAK RADIO AMATEUR ASSOCIATION, INC.

P.O. Box 16521

Colorado Springs, CO 80935

Date _____

Name _____

Address _____

City _____ State _____ Zip _____

Call _____ License Class _____

Are You An ARRL Member? ☐ Yes ☐ No Telephone _____

☐ Full Member \$12.00 ☐ Family Membership \$15.00 ☐ Newsletter Only \$6.00

☐ Age 65 or older, or under 18 \$8.00

Additional Names _____ Call _____ Class _____

Associate Member \$8.00 ☐ (Outside Teller & El Paso Counties.)

PPRAA is not associated with the Pikes Peak FM Association.